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1 Optimized Mutual Funds Investment Portfolio Through Good Corporate Governance And Financial Banking Performance

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ABSTRACT

The achievement of optimize mutual funds portfolio can increase financial performance banking be better and so their relations between mutual funds manager. Data is collected from the stock share portfolio report that are presented on record the balance of each company mutual funds report in partnership with banks as a sales agent of the mutual funds, with use linear programming application software POM for window and multiple regression application SPSS. The research results obtained the equity composition is optimize investment portfolio mutual funds this could be achieved by 6-7 kind of mutual funds stock, 9-10 kind of balanced mutual funds, 13-14 kind of mutual funds fixed income and 12-13 kind of money market mutual funds, mean there are 40-44 kind of portfolio mutual funds that can be maximized distribution of a product mutual funds it by bank as dealers products the mutual funds can optimize mutual funds portfolio up to value of IDR 1263.66 through banking financial performance.

Keywords: Mutual Funds Portfolio, Finance Banking Performance, Investment Manager

JEL Classifications: G2, G11

1. INTRODUCTION

This research of optimize portfolio analysis mutual fund investment in Indonesia banking aims to review the optimize investment portfolios mutual formed from composition equity mutual funds, balanced mutual funds, fixed income mutual funds and money market mutual funds can optimal based on institutional investors (banks), with an obstacle contained in the banking on each financial performance banks itself as an institutional investors. Research purposes was the long term objective of which are expected to be considered a decision institutional investors in forming optimal investment banking of a mutual funds portfolios. For academics expected to as an examination theoretical in the development of theory and literature library of mutual fund investment portfolios and financial management. And as a reference who want to further research with objects the same research.

With a target specifically to designate optimize composition and percentage on equity mutual funds, balanced mutual funds, and fixed income mutual funds in order to increase fee base income for the banking sector, and capable of forming mutual funds private for institutional investors.

In this research use the model optimize made it through linear simplex programming method. Problems optimize in this research mutual funds portfolio managed by investment managers and distributed a banking, with an obstacle financial performance health banking.

2. LITERATURE REVIEW

The portfolio is the combination of some shares as investment options. The goal is to minimize risk investment and optimize return. Investors bought they are not alone in a share, but buy some shares as portfolio. Based on a number of research Cheng and Lee (2001), Chandra (2011), Ashish Kumar (2011), Stephanus (2010), Bender et al. (2010), and Bettman (2009) indicates that invest investor funds on fewer shares fundamental and technical assistant good, so risk investment to be lower and its return be optimal.

Optimization model applied on portfolios mutual funds have important roles in a financial decision, a good investment portfolio is consisting of a correlation coefficient shares between its shares small. The theory investment, equity mutual funds same having a

correlation coefficient high, while equity mutual funds different having a correlation coefficient relatively small. Hence, portfolio good consisting of stocks originating from the mutual funds different.

The classical model in the selection portfolios expressed by Markowitz (1952, 1959), mean-variance model, referring to the level of certain risks, we can get value optimal expected to optimize investment portfolios; and referring to the return particular that could be given, we can get the minimum investment differently from minimize risk of portfolio. Distinct method challenged and many studies have modify this theory, and one of the popular is stock market, proposed by Sharpe (1966, 1967, 1970) Litner (1965), simplified Markowitz that included distinguishing between model covariance and return.

Since mutual funds into an investment common, many index or techniques to assess the performance of mutual funds also has been served. Your past performance mutual play an important role in providing investors with reference on how to allocate capital in the long term. Sharpe (1996) introducing a performance indicators mutual considering at risk and systematic no risk (systematic or called the total) risk to get excess return. Treynor (1965) proposed on performance portfolio can be measured by using the ratio mean risk premium at risk systematic during the evaluation portfolio instead of total risk. Jensen (1968) proposed Jensen index much better in performance measurement absolute compared with an index Sharpe and Treynor indexes. And on other research said that analysis development of other data used can be evaluate the performance of mutual funds (Murthi et al., 1997; Basso and Funari, 2001).

Have much research with the problems portfolios election using the scheme project, Sharpe (1967) proposed model linear programming aims to select portfolio open-end funds. Xia et al. (2000) a new models proposed to select considering the portfolio investor interest expected to return the portfolios. Xia et al. (2001), algorithms linear programming also applied to learn selection optimal portfolio with transaction costs. And still many other methods optimization scheme.

On this research, optimize an investment calculated with the methods simplex of linear programming. Eddy (2009. p. 10) linear programming who use the model mathematics to describe the problems to analysis. In linear contain the programming function as an effort to maximize or minimize of function of a variable. Function these restrictions derived from financial performance banks.

Investors can choose between banks or not banks can manage their mutual fund portfolios investment. The majority of investor is the bank customers who had savings and loans or deposits and can be invested them in form mutual depends on perceptions and comfort levels (Chanchai, 2012) and their assessment on financial performance banking, financial performance health banking will give perceptions and the level of comfort the best in the their customers.

Bank as an agent of strategic distributes products in mutual funds, bank always using the ability of maximum leverage level until the limit established standard Indonesia Bank, with used maximum leverage that will impact on the level of profitability and liquidity of a bank (Christoph, 2014).

3. RESEARCH METHOD

The methodology research describes the explanatory research conducted to analyse optimization a mutual funds portfolios investment through financial performance banks.

3.1. Population and Sample

The population research is listing on the bank Indonesia stock exchange about 33 bank. And engineering purposive sampling with criteria: Sample as follows Table 1.

Matrix bank made in this study discovered that there are 16 banking as dealer mutual funds and there are 20 investment managers in partnership with transaction the domestic products a mutual funds banking investment to investors.

Based on a lot of type and variation a mutual funds portfolios investment there is a kind of 44 mutual funds the bank as dealer mutual funds portfolio.

Obtained that Bank of CIMB Niaga partnered with 10 investment managers with 129 variety of mutual product was to investors, which they are: (1) PT. CIMB principal asset management, (2) PT. Mandiri Manajemen Investasi, (3) PT. Trimegah asset management, (4) PT. BNP Paribas investment partners, (5) PT. Schroder Investment Management Indonesia, (6) PT. First State Investments Indonesia, (7) PT. Danareksa Investment Management, (8) PT. Bahana TCW Investment Management, (9) PT. Manulife Aset Manajemen Indonesia, dan (10). PT. Batavia Prosperindo Aset Manajemen.

In this research we found that CIMB Niaga Bank manage 49 kind of mutual stock, 24 kind of mutual mixed and 42 kind of mutual fixed income and 14 kind of money market mutual, will form the purpose function maximize:

$$Z = 49X_1 + 24X_2 + 42X_3 + 14X_4 \tag{1}$$

Which: Z = the purpose of portfolios function optimally managed by bank, X_1 = equity mutual funds, X_2 = balanced mutual funds, X_3 = fixed income mutual funds, X_4 = money market mutual funds.

Table 1: The procedure determination of the sample collection

Criteria	Mount
The number of banking listing at the Indonesian stock exchange	33
Banks that were not enrolled in APERD	6
No profile banks as dealers mutual fund	9
The number of banking as dealers mutual funds	16

Source: BEI, 2012, The processed data

3.2. Technical Analysis of the Data Collection

3.2.1. Operational definition and variable measure

Optimize mutual funds portfolios investment is optimize an assemblage investment of several species of equity mutual funds, fixed income mutual funds, and balanced mutual funds with the equity effect, bonds and cash market using linear simplex programming method.

The purpose function with one variable: $f(X_1)$, the purpose function with n variable: $f(X_1, X_2, \dots, X_n)$, the purpose function can be formulated by: Maximum = $\sum_{j=1}^n a_j \cdot x_j$, with

$$\text{limit} = \sum_{i=1}^m \sum_{j=1}^n a_j \cdot x_j \geq b_j$$

$$x_j \geq 0 \quad (j = 1, 2, \dots, n); \quad b_j \geq 0 \quad (i = 1, 2, \dots, m)$$

With the kind of research based on analysis optimize investment portfolios exercised by a mutual funds portfolios investment on equity mutual fund banking, a balance mutual funds, fixed income mutual funds and a money market mutual fund, to find out whether investment has been done optimal, but determined return of some variable namely.

- The composition from effect stock, bonds and money market mutual funds of investment portfolio.
- The assets from equity mutual fund, balanced mutual funds and fixed income mutual funds of mutual funds portfolio investment managed by banking.
- The method Sharpe return of equity mutual funds, balanced mutual funds and fixed income mutual funds of mutual funds portfolio investment managed by banking.

$$S_{RD} = \frac{\text{Performance}_{RD} - \text{Performance}_{RF}}{\sigma}$$

S_{RD} = ratio Sharpe value.

Performance_{RD} = the mutual funds performance mean reksadana at a certain period.

Kinerja_{RF} = the free mutual funds performance mean at a certain period.

σ = mutual funds deviation standart deviation at a certain periode.

With n variable, method simplex linier programming show that the equation: Maximum yields,

$$Z = a_1X_1 + a_2X_2 + a_3X_3 + a_4X_4$$

Financial banking performance is eligibility financial performance banks can be measured from the CAR, non-performing loans (NPL), Good Corporate Governance (GCG) and return on assets (ROA) healthy health banking on the set by the bank Indonesia $Y = b_1CAR + b_2NPL + b_3GCG + b_4ROA$.

Which notation:

$$CAR = \frac{\text{Capital}}{\text{Risk weighted asset}}$$

Calculation capital and risk weighted assets according to risk done under the terms of an obligation provision of capital the prevailing minimum.

$$NPL = \frac{\text{Loans defaults}}{\text{Amount of total loans}}$$

- Loans is loans provided to a third party (not including loans from a bank other).
- Loan defaults is the one with the quality of lacking smoothly, doubtful and jammed.
- Loan defaults calculated on a gross (not reduced PPAP).
- Numbers is calculated per position do not annually.

GCG containing five key principles transparency, accountability, responsibility, independency and fairness, and created to protect the interests of all interested parties (stakeholders). Banks that apply GCG in running given a score of 1 and banking that does not apply GCG in running given a score of 0.

$$ROA = \frac{\text{Earning before tax}}{\text{Total asset}}$$

- Pretax profit is profit as recorded in profit-loser bank annually.
- The average total assets.

3.2.2. Technique analysis

Technique this analysis in several phases, among other:

- Technique analysis optimize mutual funds portfolio investment technique analysis optimize investment portfolio mutual funds with stage measurement as follows: (i) Includes the percentage composition effect stock, bonds and money market of any kind of mutual funds examined from company sample. Composition it can be obtained from portfolio effect mutual funds financial report quarterly company sample audited, (ii) count return of equity mutual funds portfolios, return of balanced mutual funds portfolio, return of fixed income mutual funds portfolio, and return of money market mutual funds portfolio by using a Sharpe method. Sharpe measuring how much the addition of investment returns obtained (risk premium to per unit of risk taken. The higher value ratio of Sharpe method the higher the return of mutual funds, (iii) Using.

$$Z = C_1X_1 + C_2X_2 + C_3X_3 + C_4X_4$$

Where: z = a function of the purpose portfolio optimal managed by bank, C_1 = z /unit equity mutual funds, C_2 = z /unit a balanced mutual funds, C_3 = z /unit fixed income mutual funds, C_4 = z /unit money market mutual funds, X_1 = equity mutual funds, X_2 = balanced mutual funds, X_3 = fixed income mutual funds, X_4 = money market mutual funds, with the constraints of/parapet: $a_1X_1 + a_2X_2 + a_3X_3 \leq b_1$ a_1 = composition effect equity, a_2 = composition effect bonds, a_3 = composition effect money market, b_1 = mutual funds return - i .

$$RP_{\text{equity mutual funds}} = \frac{S_{RDs_t} - S_{RDs_{t-1}}}{S_{RDs_{t-1}}}$$

$$RP_{\text{balanced mutual funds}} = \frac{S_{RDc_t} - S_{RDc_{t-1}}}{S_{RDc_{t-1}}}$$

$$RP_{\text{fixed income mutual funds}} = \frac{S_{RDp_t} - S_{RDp_{t-1}}}{S_{RDp_{t-1}}}$$

$$RP_{\text{money market mutual funds}} = \frac{S_{RDpu_t} - S_{RDpu_{t-1}}}{S_{RDpu_{t-1}}}$$

RP = Return of portfolio, S= Indeks Sharpe

2. Technique analysis performance banking by forming the regression equation is linear. Dependent variable that equation is a banking with an indicator the measurement of the book value clean. Based on as attachments 14 circulars bank Indonesia number 3/30/dpnp the December, 14, 2001, so the determination of the book value net obtained from the book value net fixed asset the company it was outlined in a financial filing quarterly audited. And the independent variable of the regression equation is performance banking among other: CAR, NPL, GCG, and ROA where the measurement of the calculation of by from an attachment 14 circulars bank Indonesia number 3/30/DPNP the December, 14, 2001 it was outlined in a financial filing quarterly audited So the regression equation linear performance: The banking.

Financial banking performance = $\alpha + \beta_1 CAR + \beta_2 NPL + \beta_3 GCG + \dots$

$+ \beta_4 ROA$

3. Technique analysis optimize investment portfolio mutual funds through performance mutual funds technique analysis optimize investment portfolio mutual funds through performance mutual funds in the study is done by seeking fit property of the superior test the model significant between performance banking to

portfolio mutual funds (viewed of the value of active in net participation products equity mutual funds, a balanced mutual funds, fixed income mutual funds and money market mutual funds) optimal. Model equation function obstacles is:

$$Y_1 = \alpha + \beta_1 CAR + \beta_2 NPL + \beta_3 GCG + \dots + \beta_4 ROA ;$$

$$Y_2 = \alpha + \beta_1 CAR + \beta_2 NPL + \beta_3 GCG + \dots + \beta_4 ROA ;$$

$$Y_3 = \alpha + \beta_1 CAR + \beta_2 NPL + \beta_3 GCG + \dots + \beta_4 ROA ;$$

$$Y_4 = \alpha + \beta_1 CAR + \beta_2 NPL + \beta_3 GCG + \dots + \beta_4 ROA ;$$

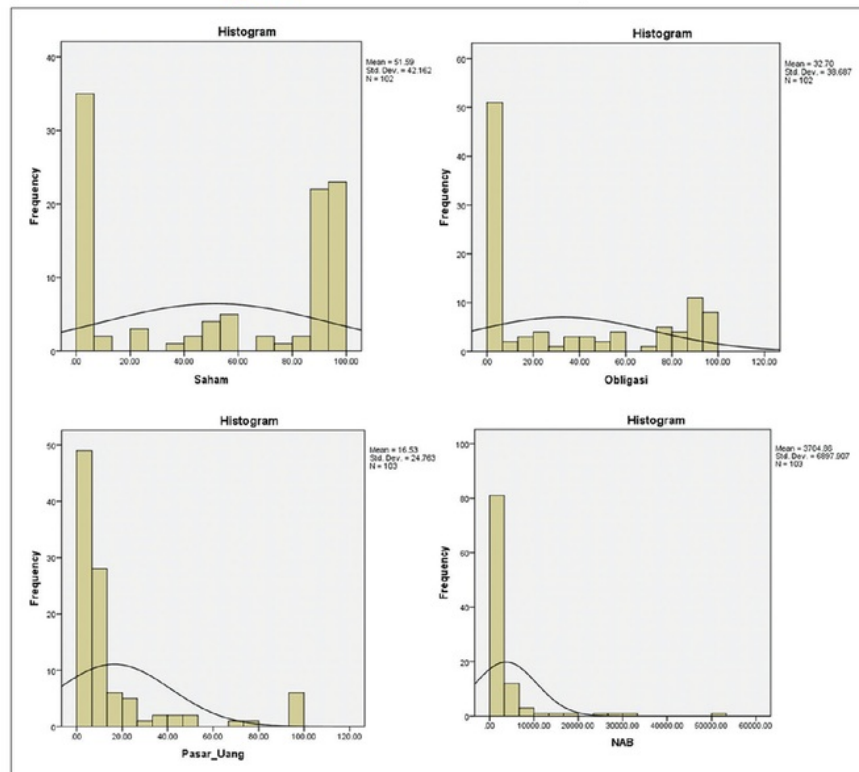
Where: Y_1 = value assets in net participation products equity mutual funds, Y_2 = value assets in net participation a balanced mutual funds, Y_3 = value assets in net participation products fixed income mutual funds and Y_4 = value assets in net participation products money market mutual funds.

4. RESULT AND DISCUSSION

4.1. Optimizing Mutual Funds Investment Portfolios

In Figure 1 appears that the movement of the equity that had average value is 51.59 with a standard error of the mean of 4.17 is at uptrends 30-40 frequency range with class it means interval 0.00-20.00 composition stocks in a mutual funds 0-20 portfolio % the movement trends increased and the frequency are downtrends the range of 20-30 with class it means interval 80.00-100.00 composition shares in a mutual funds portfolios % the movement trends 80-100 declined.

Figure 1: The movement of mutual funds portfolios



Source: Output data SPSS

The movement of bonds in that it has value an average 32.70 with standard error of mean of 3.83 is at uptrends frequency the range 00-10 to the class intervals 0.00-40.00 it means composition of bonds in a portfolio mutual funds 0-40% the movement trends increased and were on downtrends frequency the range 10-20 to the class intervals 80.00-100.00 it means composition of bonds in a portfolio mutual funds from 80% to 100% the movement trends decline.

Money market movements in that it has value an average 16.53 with standard error of mean of 2.44 is at uptrends frequency the range from to the class intervals 0.00-20.00 it means composition money market mutual funds in a portfolio 0-20% the movement trends increased and were on downtrends frequency the range 00-10 to the class intervals 40.00-80.00 it means composition money market mutual funds in a portfolio 40-80% the movement trends decline.

The movement of assets in that it has value an average he 3704.86 with standard error of mean of 679.67 is at uptrends frequency the range 00-30 to the class intervals 0.00-1000.00 it means assets of a mutual fund portfolios increased maximum a multiple 1000 and were on downtrends frequency the range 00-10 to the class intervals 1500.00-2000.00 it means assets a mutual fund portfolios to be in the range he 1500.00-2000.00 its trend decline.

4.2. Financial Banking Performance

In Table 2, data financial performance banking look that the average CAR at 14.99%, the average its of 2.69%, the average GCG of 1.26% and the average ROA of 1.03%. And the average the book value financial performance of the banking IDR 1.606.13651 of the value of maximum IDR 2.773.42100 and value of minimum of IDR 462.23900.

In Table 2, look factors the movement of financial performance that is CAR, NPL, GCG and ROA showing that the maximum CAR at 17.45% its minimum of 12.10%, a maximum score its of 4.28% its minimum of 1.54%, a maximum score GCG of 1.53% a minimum of 1.08%, and a maximum score ROA of 2.78% its minimum of 0.19%.

Testing normality error done with normality error fulfilling goodness of fit according to standard provisions required in the model ordinary least square (OLS), To create the ratio Skewness and kurtosis in a position to 2 until + 2. Value the ratio Skewness and kurtosis in all the variables equation 3-1 located in a position to 2 until + 2 or <2. Concluded that data CAR, NPL, GCG and ROA and financial performance banking is being distributed normal, that it according to standard provisions required in the model OLS was in this Figure 2.

In Figure 2 it can be seen that scatterplot form points spread and do not form a specific pattern clear. So that can be concluded that no heteroscedasticity among all the variable of this research.

If we are watching Figure 3 it can be seen that charts histogram equation 2, 3, 4, 5 and 6 provides the distribution pattern near normal. Hence, can be concluded that data has a normal distributed, According to the standard of provisions required in the model OLS. And on a chart normal probability a plot look points spread around the diagonal line, and their distribution are followed the direction the diagonal line. Hence, can be concluded that data CAR, NPL, GCG and ROA are distributed normal, means is according to the standard provisions required in the model OLS.

If we look at Figure 1, then the histogram graph equations 2, 3, 4, 5 and 6 provide a distribution pattern of approaching normal. Therefore, it can be concluded that data is Gaussian, mean is in compliance with the standard conditions required in the OLS model. And normal probability plot on the graph of the equations 2, 3, 4, 5 and 6 visible dots spread around the diagonal lines, as well as its spread following the direction of the diagonal lines. Therefore, it can be concluded that data on CAR, NPL, GCG and ROA Gaussian, mean is in compliance with the standard conditions required in the OLS model.

4.3. Mutual Funds Investment Through Financial Banking Performance

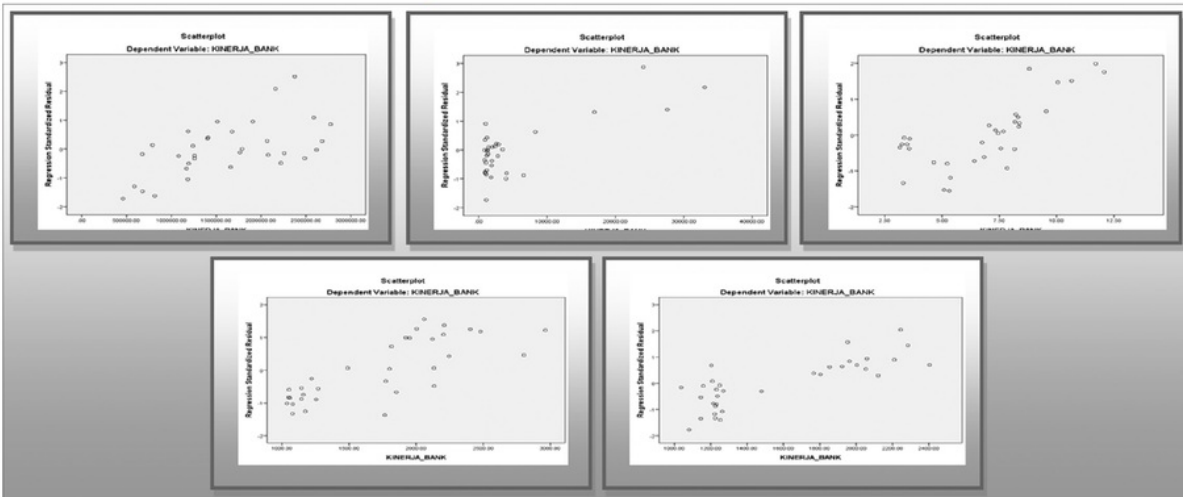
The results of testing in program SPSS who are presented on Table 3 form equation financial performance banking as follows:

Table 2: Dekriptive of statistik movement CAR, NPL, GCG, ROA and financial banking performance

Description	Capital adequacy ratio	Nonperforming loan	Good corporate governance	Return on asset	Financial banking performance
N					
Valid	33	33	33	33	33
Missing	0	0	0	0	0
Mean	14.9967	2.6991	1.2582	1.0327	1606136.5152
Standard error of mean	0.24811	0.11205	0.03604	0.12513	116782.96649
Median	15.3900	2.6400	1.1100	0.8900	1513645.0000
Mode	15.08	2.41a	1.10a	0.49	1258532.00
Standard deviation	1.42527	0.64371	0.20702	0.71885	670867.06705
Variance	2.031	0.414	0.043	0.517	450062621656.633
Skewness	-0.639	0.796	0.570	0.780	0.116
Standard error of Skewness	0.409	0.409	0.409	0.409	0.409
Kurtosis	-0.489	0.761	-1.756	-0.340	-1.067
Standard error of Kurtosis	0.798	0.798	0.798	0.798	0.798
Range	5.35	2.74	0.45	2.59	2311182.00
Minimum	12.10	1.54	1.08	0.19	462239.00
Maximum	17.45	4.28	1.53	2.78	2773421.00

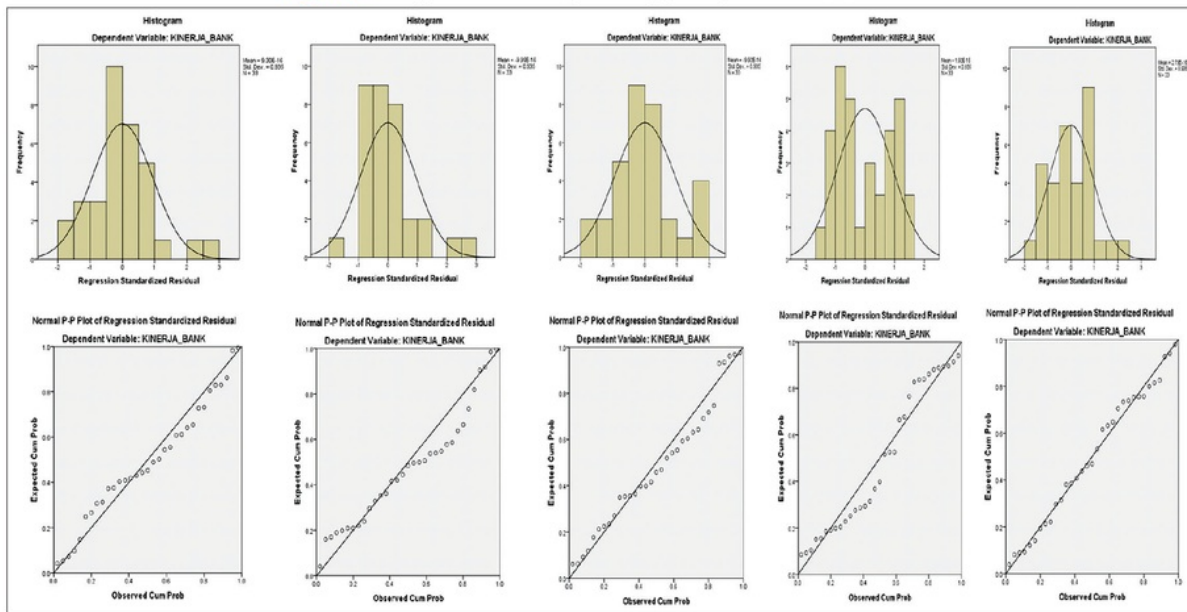
*Multiple modes exist. The smallest value is shown. CAR: Capital adequacy ratio, NPL: Nonperforming loan, GCG: Good corporate governance, ROA: Return on assets

Figure 2: Scatterplot equations 2, 3, 4, 5 and 6



Source: Output data SPSS

Figure 3: Histogram and normal probability plot equations 2, 3, 4, 5 and 6



Source: Output data SPSS

$$Y = -0.058CAR + 0.435NPL + 0.501GCG + 0.143ROA \quad (2)$$

Value the coefficients car and ROA each of -0.058 and 0.143 with a significance $>5\%$ it means influence CAR and ROA not significantly to financial performance banking. The coefficients its value of 0.435 with a significance $<5\%$ it means to the influence of its investment portfolio mutual funds stock significant with of the relations a positive. The coefficients GCG value of 0.501 with a significance $<5\%$ it means influence GCG to financial performance banking significant with of the relations a positive. The influence of CAR, NPL, GCG and ROA simultaneously of

60.5% of financial banking performance with the test f of 13.207 and the level significance smaller from 5% .

$$Y_1 = 0.275CAR + 0.620NPL - 0.182GCG - 0.149ROA \quad (3)$$

Value the coefficients CAR, GCG and ROA each of 0.275 , -0.182 and -0.149 with a significance $>5\%$ it means influence CAR, GCG and ROA not significantly to investment portfolio mutual funds stock. The coefficients its value of 0.620 with a significance $<5\%$ it means to the influence of its investment portfolio equity mutual funds significant with of the relations a positive. The influence of

CAR, NPL, GCG and ROA simultaneously of 32.7% of investment portfolio mutual funds shares with value test f of 4.875 and the level significance smaller from the 5%.

$$Y_2 = -0.204CAR - 0.492NPL - 0.159GCG - 0.293ROA \quad (4)$$

Value the coefficients car, GCG and ROA each of -0.204, -0.159 and -0.293 with a significance >5% it means influence CAR, GCG and ROA not significantly to a balanced mutual fund investment portfolio. Its coefficients value of -0.492 with a significance <5% it means to the influence of its balanced mutual funds investment portfolio is negative significant relations. The influence of CAR, NPL, GCG and ROA simultaneously of 36.4% of its balanced mutual funds investment portfolio value F-test is 5.588 and the level significance smaller from the 5%.

$$Y_3 = -0.125CAR - 0.425NPL + 0.765GCG - 0.057ROA \quad (5)$$

Value the coefficients CAR and ROA each of -0.125 and -0.057 with a significance >5% it means influence car and ROA not significantly to fixed income mutual funds investment portfolio. The coefficients its value of -0.425 with a significance 0.024 <5% it means to the influence of its fixed income mutual funds investment portfolio significant negative. And value of the coefficients GCG of 0.765 with a significance 0.00 <5% it means influence GCG to fixed income mutual funds investment portfolio significant positive. The influence of CAR, NPL, GCG and ROA simultaneously of 30.3% of fixed income mutual funds investment portfolio with the F-test is 4.483 and the level significance smaller from the 5%.

$$Y_4 = 0.602CAR - 0.077NPL - 0.193GCG + 0.002ROA \quad (6)$$

The coefficients its value, GCG and ROA each of -0.077, -0.193 and 0.002 with a significance >5% it means its influence, GCG and ROA not significantly to money market mutual funds investment portfolio. Value the coefficients CAR at 0.602 with a significance <5% it means influence CAR to money market mutual funds investment portfolio significant positive (Table 4).

The influence of CAR, NPL, GCG and ROA simultaneously of 25.4% of money market mutual funds investment portfolio with the F-test is 3.724 and the level significance is 0.015 smaller from the 5%.

Based on sample research obtained 49 kinds of equity mutual fund, 24 kind of a balanced mutual funds, 42 kind of fixed income mutual funds and 14 kind of money market mutual funds it can be formed function equation optimize investment portfolio mutual funds:

$$Z = 49X_1 + 24X_2 + 42X_3 + 14X_4 \quad (1)$$

To function obstacles derived from the equity composition, bonds and money market allocated by each investment managers to in their equity mutual fund portfolios, a balanced mutual funds, fixed income mutual funds and money market mutual funds, to function obstacles maximum 90 obstacles so found function optimize investment portfolio mutual funds:

Table 3: Regression coefficient banking financial performance

Model	Y	Y ₁	Y ₂	Y ₃	Y ₄
CAR					
Standardized coefficient	-0.058	0.275	-0.204	-0.125	0.602
T-value	-0.479	1.732	-1.325	-0.773	3.608
T-sign.	0.636	0.094	0.196	0.446	0.001
NPL					
Standardized coefficient	0.435	0.620	-0.492	-0.425	-0.077
T-value	3.239	3.531	-2.888	-2.383	-0.416
T-sign.	0.003	0.001	0.007	0.024	0.681
GCG					
Standardized coefficient	0.501	-0.182	-0.159	0.765	-0.193
T-value	3.549	-0.989	-0.886	4.076	-0.993
T-sign.	0.001	0.331	0.383	0.000	0.329
ROA					
Standardized coefficient	0.143	-0.149	-0.293	-0.057	0.002
T-value	1.225	-0.979	-1.978	-0.367	0.013
T-sign.	0.231	0.336	0.058	0.717	0.990

Source: The processed data, SPSS

Table 4: Goodness of fit statistics banking financial performance

Model	Y	Y ₁	Y ₂	Y ₃	Y ₄
R-value	0.809 ^b	0.641 ^b	0.666 ^b	0.625 ^b	0.589 ^b
R ² -value	0.655	411	0.444	0.390	0.347
Adjusted R ²	605	0.327	0.364	0.303	0.254
F-value	13.207	4.879	5.588	4.483	3.724
F-sign.	0.000	0.004 ^b	0.002 ^b	0.006 ^b	0.015 ^b

^bPredictors: (Constant), ROA, CAR, NPL, GCG. Source: The processed data, SPSS

$$Z = 6.07X_{11} + 9.58X_{21} + 13.52X_{31} + 12.03X_{41} \quad (2)$$

Optimize this mutual funds portfolio investment could be achieved by 6-7 kind of equity mutual funds, nine to ten per kind of balanced mutual funds, 13-14 kind of fixed income mutual funds and 12-13 kind of money market mutual funds, mean there are 40-44 kind of mutual funds portfolio that can be maximized distribution of a product mutual funds banking as dealers products of the mutual funds, remember the principle banking prudential, the principle prudence in the management of their customers. The activities of the forming cooperation keep soundness banking which has been decided together among authority financial services as a fairness activity of Indonesia banking and non-banking.

The optimize value of mutual funds portfolio investment is IDR 1263.66 that can be attained by investment managers to the ability of allocate the equity composition, bonds and money market in an mutual funds portfolio investment distributed in a bank as dealers products the mutual fund portfolios. To be able to maximize the function of optimization investment mutual funds portfolio that is distributed by a bank as dealers products of mutual funds to function obstacles financial performance the banking, among others:

$$-0.058CAR + 0.435NPL + 0.501GCG + 0.143ROA \leq 1606137$$

$$0.275CAR + 0.620NPL - 0.182GCG - 0.149ROA \leq 4978.434$$

-0.204CAR-0.492NPL-0.159GCG-0.293ROA≤4713.033
-0.125CAR-0.425NPL+0.765GCG-0.057ROA≤1723.034
0.602CAR-0.077NPL-0.193GCG+0.002ROA≤1567.362

In Table 3 can be seen that good GCG management by a banking affect the increase of fixed income mutual funds. Composition of fixed income mutual funds from the majority were bonds and money market allocated by investment manager maximum 100% yield on in fixed income mutual funds as in Bahana Kehati Lestari and 100 yield on in mutual funds money market as in Bahana Dana Likuid serta Manulife Dana Kas II.

An increase in assets management fixed income mutual funds after optimizing investment of mutual funds portfolio through financial performance bank can reach IDR104.476.8 with the 13.52% allocation fixed income mutual funds in distributed bank as dealers mutual funds.

In Table 3 can be seen that management ROA derived from management net profit after tax and total assets good by banking affect the increase of money market mutual funds. Composition money market mutual funds this 100% coming from money market of on deposits government agencies Indonesia and agencies/private allocated by investment managers.

Increased NAB management money market mutual after optimizing investment portfolios mutual through financial performance banks can reach IDR 10.865.690, - with the 12.03% the money market mutual in distributed bank as dealers mutual.

Increased NAB mutual management fixed income and NAB money market mutual impact among the income non interest or fee based income bank reached by IDR 132.150.800. This could be one of the bank in improving the source of non-interest income bank rate/fee based income, with the form of cooperation bank as dealer mutual products and investment managers who publishes and manage composition investment portfolio the mutual.

5. CONCLUSION

The healthy of Financial performance banking as dealers mutual funds need to manage its and GCG a good, a positive influence the non-performing and GCG indicates increasing financial performance banking. Improving financial performance banking focused on it said, it is about management credits troubled which could have been treated well by bank will have an impact on optimize investment equity mutual funds portfolio and balanced mutual funds portfolio. Its management and GCG significant to the direction of a positive relationship can optimize investment of fixed income mutual funds portfolio. And influence bad CAR from positive in optimizing investment of money market mutual funds portfolio can be achieved.

Optimize investment of mutual fund portfolios could be achieved by 6-7 kind of equity mutual funds, 9-10 kind of balanced mutual funds, 13-14 kind of fixed income mutual funds and 12-13 kind of money market mutual funds, that is kind of 40-44 mutual funds portfolio can maximized the distribution of a product mutual funds by banks as

dealers products, the prudential principles of banking, the prudential in the management of their transaction customers form of this cooperation keep soundness banking had decided together authority financial services as a banking activity and non-banking in Indonesia.

6. IMPLICATION

Compliance allocation effect of mutual fund portfolio composition conducted by investment managers will reach optimize investment better when added in selection and stock market a timing owned investment managers in choosing equity and money market mutual into the portfolio.

Investment portfolios mutual managed by investment managers be better if partnered with banks in marketing of these products to customers banks as one alternative investment the customers. Expected through banking financial performance better be able to support the optimize investment portfolio the mutual. And besides prediction CAR and NPL as part of banking financial performance as an indication of measurement increased optimize investment portfolio the mutual, there needs to be further research on indicating gauges financial performance banks that can be used as the basis of the measurements level indicators mutual funds optimize investment portfolio managed by investment managers partner in the partnership as the management of increased optimize mutual funds portfolio investment.

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